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1. A structure for accepting, transporting, and retaining fluids comprising:

5 (a) a nonwoven comprising a plurality of hydrophilic capillary channel fibers capable of interfiber and intrafiber fluid acceptance and transport, said fibers having at least one capillary channel formed from a base and two substantially parallel walls extending from the base; and

(b) a high-suction absorbent core in fluid communication with said nonwoven.

2. The structure according to Claim 1 wherein the divergence of the substantially parallel walls of the capillary channel fibers of said nonwoven is less than about 40°.

3. The structure according to Claim 1 wherein the slenderness ratio of said capillary channel fibers forming said nonwoven is at least about 9.

4. The structure according to Claim 1 wherein the capillary suction of said absorbent core is at least about 6 cm.

5. The structure according to Claim 1 wherein the capillary channel width of the capillary channel fibers of said nonwoven is from about 10 microns to about 200 microns.

6. The structure according to Claim 1 wherein the denier of said capillary channel fibers of said nonwoven is greater than about 5.

7. A structure for accepting, transporting, and retaining fluids comprising:

5 (a) a first nonwoven comprising a plurality of hydrophilic capillary channel fibers capable of interfiber and intrafiber fluid acceptance and transport, said fibers having at least one

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capillary channel formed from a base and two substantially parallel walls extending from the base;

(b) a second nonwoven superposed upon said first nonwoven; and

10 (c) a high-suction absorbent core in fluid communication with said nonwovens.

8. The structure according to Claim 7 wherein said second nonwoven comprises a plurality of hydrophilic capillary channel fibers capable of interfiber and intrafiber fluid acceptance and transport, said fibers having at least one capillary channel formed  
5 from a base and two substantially parallel walls extending from the base.

9. The structure according to Claim 7 wherein the divergence of the substantially parallel walls of the capillary channel fibers of said first nonwoven is less than about 40°.

10. The structure according to Claim 8 wherein the divergence of the substantially parallel walls of the capillary channel fibers of said second nonwoven is less than about 40°.

11. The structure according to Claim 7 wherein the slenderness ratio of said capillary channel fibers forming said first nonwoven is at least about 9.

12. The structure according to Claim 8 wherein the slenderness ratio of said capillary channel fibers forming said second nonwoven is at least about 9.

13. The structure according to Claim 7 wherein the capillary suction of said absorbent core is at least about 6 cm.

14. An absorbent article comprising:

(a) a fluid pervious topsheet;

(b) a fluid impervious backsheet joined to said topsheet;

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5 (c) a high-suction absorbent core positioned between said topsheet and said backsheet, said core having an uppermost surface facing said topsheet and a lowermost surface facing said backsheet; and

10 (d) a nonwoven positioned between said topsheet and said absorbent core, said nonwoven comprising a plurality of hydrophilic capillary channel fibers capable of intrafiber and interfiber fluid acceptance and transport, said fibers having at least one capillary channel formed from a base and two substantially parallel walls extending from the base.

15. The absorbent article according to Claim 14 wherein the divergence of the substantially parallel walls of the capillary channel fibers of said nonwoven is less than about 40°.

16. The absorbent article according to Claim 14 wherein the slenderness ratio of said capillary channel fibers forming said nonwoven is at least about 9.

17. The absorbent article according to Claim 14 wherein the capillary suction of said absorbent core is at least about 6 cm.

18. An absorbent article comprising:

5 (a) a fluid pervious topsheet, said topsheet comprising a nonwoven comprised of a plurality of hydrophilic capillary channel fibers capable of intrafiber and interfiber fluid acceptance and transport, said fibers having at least one capillary channel formed from a base and two substantially parallel walls extending from the base;

(b) a fluid impervious backsheet joined to said topsheet; and

10 (c) a high-suction absorbent core positioned between said topsheet and said backsheet, said core having an uppermost surface facing said topsheet and a lowermost surface facing said backsheet.

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19. The absorbent article according to Claim 18 wherein the divergence of the substantially parallel walls of the capillary channel fibers of said topsheet is less than about 40°.

20. The absorbent article according to Claim 18 wherein the slenderness ratio of said capillary channel fibers forming said topsheet is at least about 9.

21. The absorbent article according to Claim 18 wherein the capillary suction of said absorbent core is at least about 6 cm.

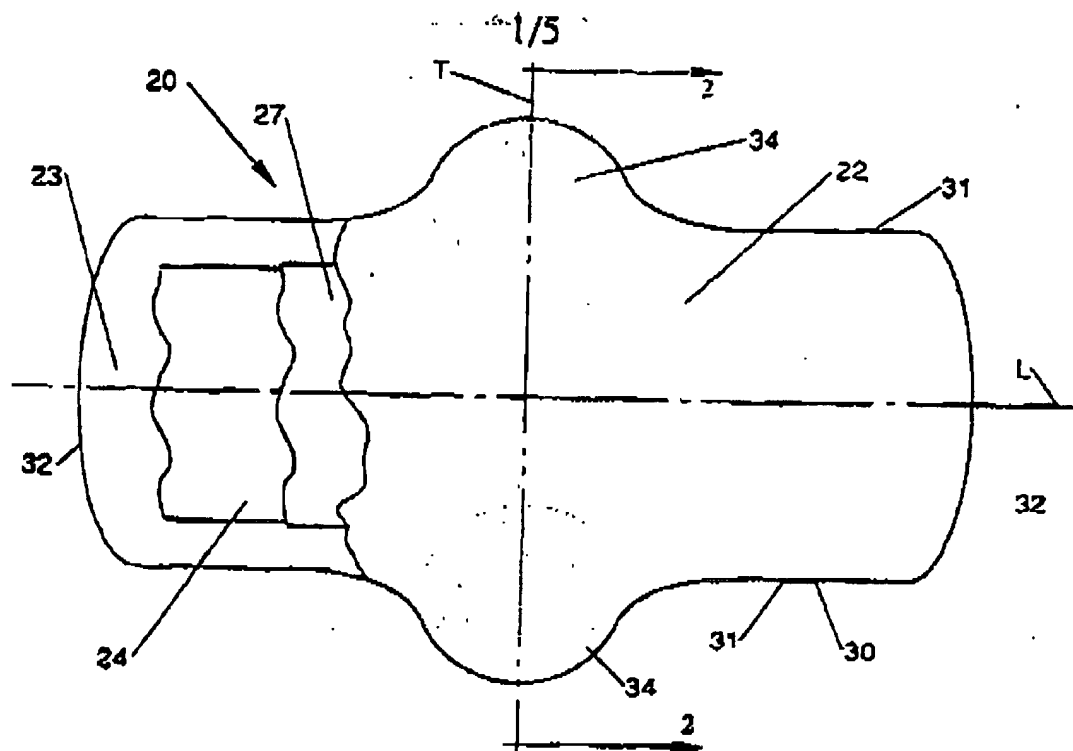


Fig. 1

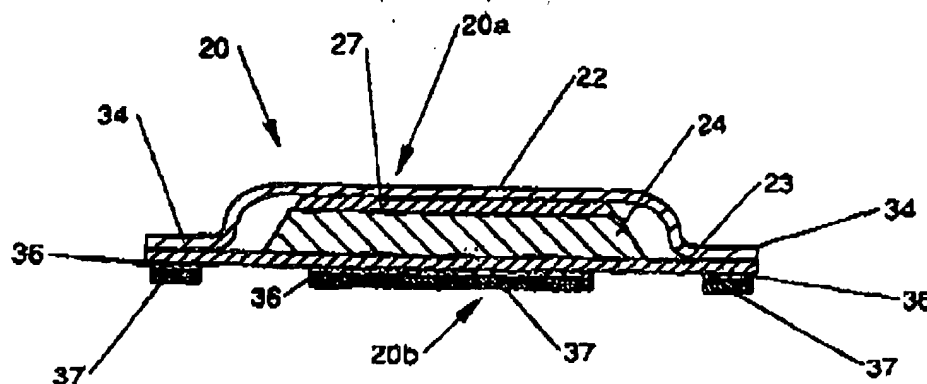


Fig. 2

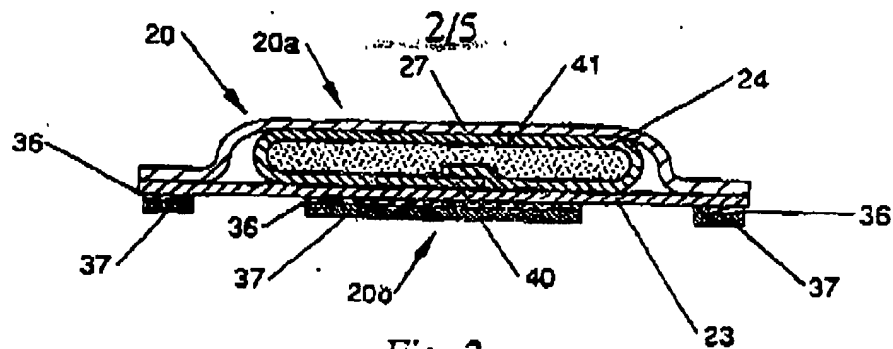


Fig. 3

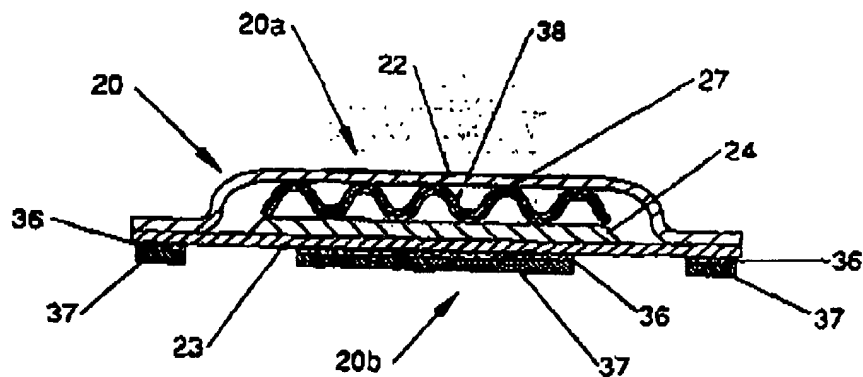


Fig. 4

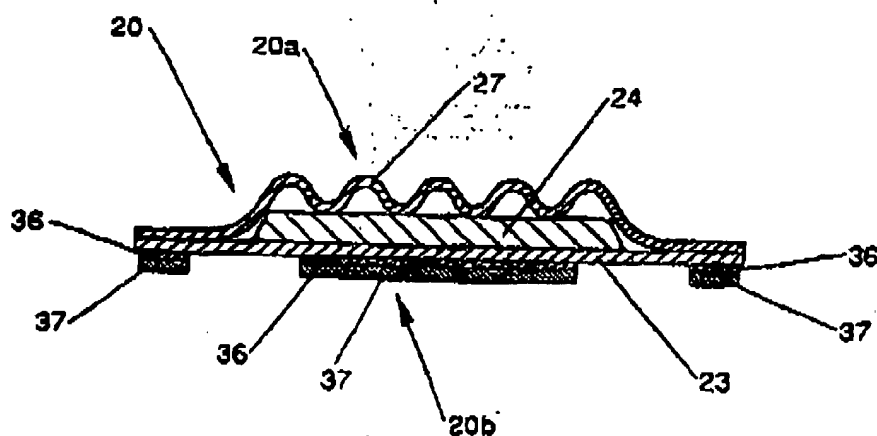


Fig. 5

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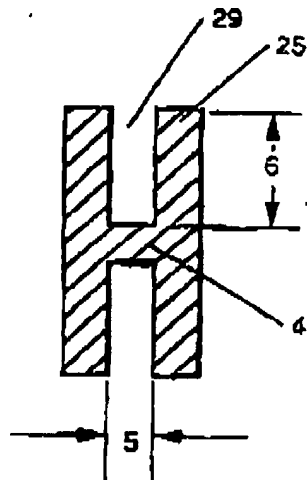


Fig. 6

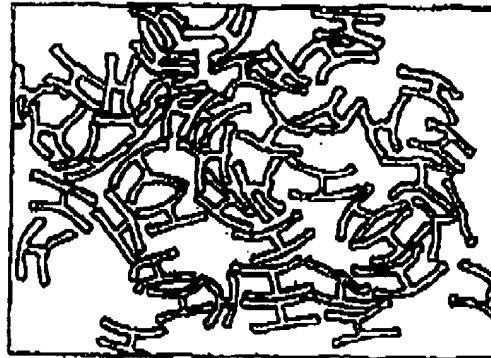


Fig. 7

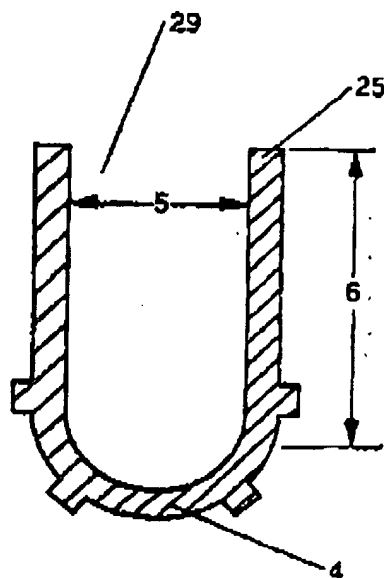


Fig. 8

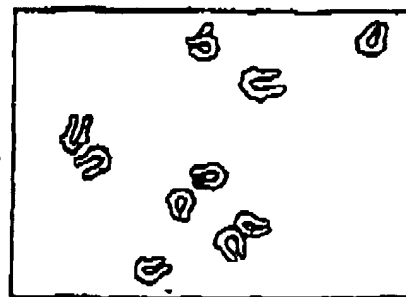


Fig. 9



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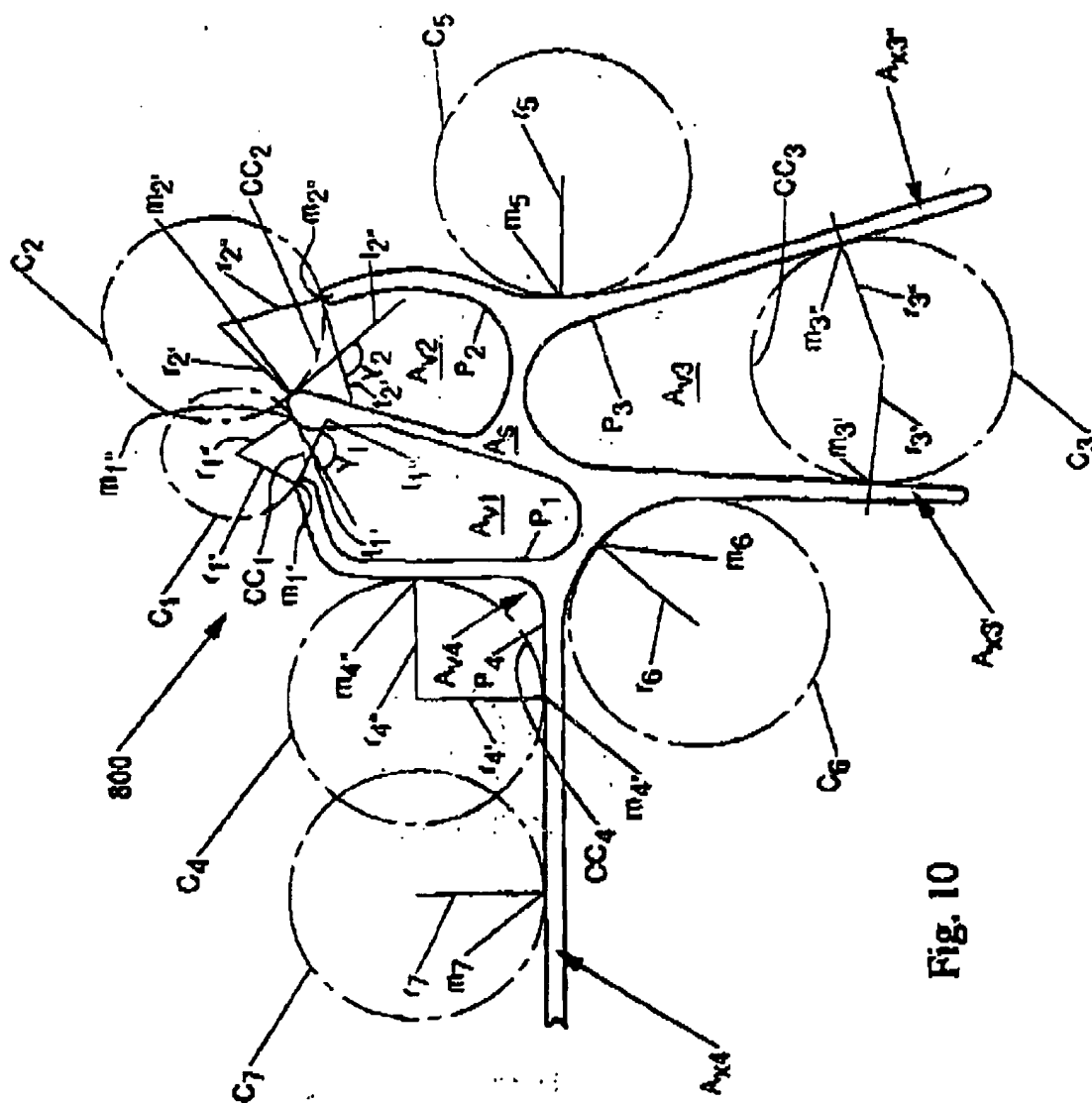


Fig. 10

